

Wetland Development or Restoration

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 657

04/02



DEFINITION

Wetland Development or Restoration is construction or restoration of wetland to provide the hydrological and biological benefits of a wetland site.

PRACTICE INFORMATION

This practice applies primarily to areas that were once wetland but were drained to accommodate another land use. It also applies to sites that were never wetland but are capable of storing water for wetland purposes. In most cases, dikes, or other

water control structures are used to create or improve water storage on the site.

The purpose of this practice is to establish or reestablish wetlands for the benefit of wildlife, to reduce flooding, provide offsite water quality benefits, and increase groundwater recharge.

Additional information including design criteria and specifications are in the local NRCS Field Office Technical Guide.

The following pages list the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, and soil. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

STATE		FIELD OFFICE		DATE	
PRACTICE: 657 Wetland Development or Restoration			NOTES:		
RESOURCE: SOIL					
RESOURCE CONCERN: EROSION					
RESOURCE INDICATORS			PHYSICAL EFFECTS		
SHEET AND RILL			significant reduction in sheet and rill erosion		
WIND			significant reduction in wind erosion		
EPHEMERAL GULLY			significant reduction in ephemeral gully erosion		
CLASSIC GULLY			N/A		
STREAMBANK			N/A		
IRRIGATION INDUCED			N/A		
SOIL MASS MOVEMENT			N/A		
ROADBANK/CONSTRUCTION			N/A		
OTHER					
RESOURCE CONCERN: SOIL CONDITION					
SOIL TILTH			N/A		
SOIL COMPACTION			N/A		
SOIL CONTAMINATION					
• SALTS			significant reduction in soil salinity		
• ORGANICS			N/A		
• FERTILIZERS			N/A		
• PESTICIDES			N/A		
• OTHER					
DEPOSITION/DAMAGE					
• ONSITE			significant reduction/onsite deposition damage		
• OFFSITE			significant decrease/offsite deposition damage		
DEPOSITION/SAFETY					
• ONSITE			significantly improve onsite safety/deposition		
• OFFSITE			sign. improve offsite safety hazard/deposition		
OTHER					
RESOURCE: WATER					
RESOURCE CONCERN: WATER QUANTITY					
SEEPS			moderate increase in seepage hazard		
RUNOFF/FLOODING			moder. decrease in runoff/flooding		
EXCESS SUBSURFACE WATER			moderate increase in excess subsurface water		
INADEQUATE OUTLETS			N/A		
WATER MGT. IRRIGATION					
• SURFACE			N/A		
• SPRINKLER			N/A		
WATER MGT. NON-IRRIGATED			N/A		
RESTRICTED FLOW CAPACITY (H2O convey.)					
• ONSITE			significant retardance of onsite drainage		
• OFFSITE			N/A		
RESTRICTED STORAGE			sign. reduction in sedimentation of H2O storage		

RESOURCE: WATER	
RESOURCE CONCERN: WATER QUALITY	
RESOURCE INDICATORS	PHYSICAL EFFECTS
GROUNDWATER CONTAMINANTS	
• PESTICIDES	slight potential increase/GWater contam./pesticide
• NUTRIENTS AND ORGANICS	slight poten. increase in GWater contam./nutr,org.
• SALINITY	slight poten. increase/GWater contam./salinity
• HEAVY METALS	slight poten. increase/GWater contam./heavy metal
• PATHOGENS	slight poten. increase/GWater contam./pathogens
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	slight reduction in SWater contam./pesticides
• NUTRIENTS AND ORGANICS	slight reduction in SWater contam./nutr.,organics
• SUSPENDED SEDIMENTS	sign. reduction in SWater contam./susp. sedi.
• LOW DISSOLVED OXYGEN	slight reduction in SWater contam./low oxygen
• SALINITY	sign. reduction in SWater contam./salinity
• HEAVY METALS	slight reduction in SWater contam./heavy metals
• WATER TEMPERATURE	situational concerning SWater contam./H2O temp.
• PATHOGENS	slight decrease in SWater contam./pathogens
AQUATIC HABITAT SUITABILITY	significant improvement in Aqua. Hab. Suit.
OTHER	
RESOURCE: AIR	
RESOURCE CONCERN: AIR QUALITY	
AIRBORNE SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	N/A
• OFFSITE SAFETY	N/A
• ONSITE STRUCT. PROBLEMS	N/A
• OFFSITE STRUCT. PROBLEMS	N/A
• ONSITE HEALTH	N/A
• OFFSITE HEALTH	N/A
AIRBORNE SEDIMENT CAUSING CONVEYANCE PROBLEMS	N/A
AIRBORNE CHEMICAL DRIFT	N/A
AIRBORNE ODORS	N/A
FUNGI, MOLDS, AND POLLEN	N/A
OTHER	
RESOURCE CONCERN: AIR CONDITION	
AIR TEMPERATURE	N/A
AIR MOVEMENT (windbreak effect)	N/A
HUMIDITY	N/A
OTHER	

[illegible]

RESOURCE: HUMAN	
RESOURCE CONCERN: SOCIAL CONSIDERATIONS	
RESOURCE INDICATORS	PHYSICAL EFFECTS
PUBLIC HEALTH AND SAFETY	sign. improvement in public health & safety
PRIVATE/PUBLIC VALUES	sign. improvement in private/public values
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	moderate risk involved
TENURE	N/A
OTHER	
RESOURCE CONCERN: CULTURAL CONSIDERATIONS	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	situational regarding cultural resources
SIGNIFICANCE OF CULTURAL RESOURCES	situational regarding cultural resources
MITIGATION OF NEGATIVE CULTURAL RES. IMPACTS	situational regarding cultural resources
OTHER	